

REMARKS

Claims 1, 3-9, 11-15, and 17-28 are currently pending in the subject application and are presently under consideration. Applicants' representative thanks the Examiner for the telephonic interview in regard to the subject application conducted on January 10, 2007, where it was agreed that Watanabe does not teach or suggest maintaining full power to the CPU and network radio as recited in claims 1, 14, and 19, and Brubacher-Cressman, *et al.* does not teach or suggest the elements recited in claims 27 and 28.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1, 3-9, 11-15, and 17-25 Under 35 U.S.C. §103(a)

Claims 1, 3-9, 11-15, and 17-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada, *et al.* (US 2001/0044332) in view of Watanabe (US 6,542,726). It is requested that this rejection be withdrawn for at least the following reasons. Yamada, *et al.* and Watanabe, when taken alone or in combination, fail to disclose, teach, or suggest all elements of the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations*. See MPEP §706.02(j). The *teaching or suggestion to make the claimed combination* and the reasonable expectation of success *must be found in the prior art and not based on the Applicant's disclosure*. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

The claimed subject matter generally relates to facilitating selective power management in a wireless mobile terminal such that some portions of the terminal may remain powered and operable while removing power from components not being utilized. More specifically, a plurality of power management schemes, stored in a configuration

bank, can be employed as claimed while ensuring continuous and uninterrupted network connectivity by maintaining power to components necessary to facilitate such connectivity (e.g., network radio, CPU, etc). To this end, independent claim 1 (and similarly claims 14 and 19) recites *a configuration bank that stores power management schemes for a wireless mobile terminal; and a power management component that utilizes at least one power management scheme to selectively control power to at least one portion of the wireless mobile terminal and maintains full power to a central processing unit (CPU) and a network radio of the wireless mobile terminal to ensure reliable uninterrupted network communication while removing power from other portions of the wireless mobile terminal to reduce power consumption.* Yamada, *et al.* and Watanabe do not, alone or in combination, teach or suggest such claimed aspects.

Yamada, *et al.* generally relates to a power management scheme for devices containing magnetic disks or other components that require a significant amount of power to operate. Specifically, Yamada, *et al.* discloses a component being notified of a peak power consumption event (e.g., a magnetic drive spinning-up), and reducing power to other components based on this event. (See pg. 3, ¶¶ [0035] and [0036]). The system then waits for notification that the peak power consumption event has ceased, and once this notification is received, the reduced power components are given full power again. (See pg. 3, ¶ [0037]).

Examiner acknowledges that Yamada, *et al.* fails to disclose ***maintaining full power to a CPU and a network radio.*** Examiner offers Watanabe to cure this deficiency; however, Watanabe fails to adequately account for this aspect as well. Watanabe relates to a personal data assistant device and more particularly to reducing noise generated by a CPU of the device during radio transmissions. Accordingly, Watanabe discloses 4 operating modes whereby each mode supplies a different level of power to CPU (See col. 2, lines 58-67). The aim of Watanabe is to utilize one of the modes to attain a desired level of power to the CPU such that less power is provided during radio transmission – and hence less noise produced – to increase the reliability of the transmission in progress. However, Watanabe is silent with respect to ***maintaining full power to a CPU and a network radio.***

Specifically, in the section cited by the Examiner, Watanabe does not disclose maintaining full power to the CPU. Rather, the “SLOW” mode lowers the frequency of the system clock signal thereby reducing power supplied to the CPU. (See col. 4, line 66-col. 5, line 1, stating “In the ‘SLOW’ mode, the *power dissipation* and the output noise of the CPU are in the second highest.”) Thus, the CPU in the “SLOW” mode does not operate as it does in the “FULL” mode. It runs the “same operational functions,” meaning it can perform the same tasks, but it does so with decreased power supplied to the CPU. This is not indicative of ***maintaining full power to the CPU*** as asserted by the Examiner.

Furthermore, Watanabe does not contemplate ***maintaining full power to a network radio*** as recited in the subject claims. Rather, Watanabe merely discloses reducing noise produced by the CPU during radio transmissions, and is completely silent regarding this aspect of the subject claims. Thus, when not in radio transmission, the power to the radio is presumably off as with most devices. Moreover, Watanabe does not disclose maintaining power to a network radio in such a way to ***ensure reliable uninterrupted network communication***. This is so because if Watanabe disclosed such functionality, the device could never run in “FULL” mode as that mode would produce too much noise to reliably communicate *via* radio communication. As stated, *supra*, this would go against the aim of Watanabe – to reduce noise produced by the CPU in order to facilitate interference with a radio transmission signal.

In view of at least the foregoing, it is apparent that Watanabe fails to make up for the aforementioned deficiencies of Yamada, *et al.* with respect to claims 1, 14, and 19. Therefore, rejection of these claims, and claims 3-9, 11-13, 15, 17-18, and 20-25 which respectively depend therefrom, should be withdrawn at least on the foregoing grounds.

Moreover, in the sections cited by the Examiner in support of ***a configuration bank that stores power management schemes*** as recited in claim 1, Yamada, *et al.* discloses a CPU and an LCD having normal and power saving modes of operation. In the event that a peak power consumption operation is initiated, the power of the CPU and LCD is reduced to the power saving mode. When the peak power consumption process completes, these components are brought back to normal modes of operation. There is no mention, however, of ***a configuration bank that stores power management schemes***.

For at least the foregoing reasons, and since the reference is otherwise silent, Yamada, *et al.* alone does not teach this aspect of claim 1 as asserted by the Examiner.

Additionally, in regard to claim 18, Examiner contends that Yamada, *et al.* teaches *returning power to the portion of the portable terminal upon receiving a signal from a wake event comprising one of a link status change, a network keep alive, a proxy-ARP packet, and a re-authentication packet*. However, Yamada, *et al.* only discloses returning power to a CPU and LCD upon the termination of a peak power consumption event. According to Yamada, *et al.*, peak power consumption events consist of spin-up (upon accessing) of a hard disk or other magnetic-disk device. (See pg. 2, ¶¶ [0018] and [0022] and pg. 3, ¶¶ [0034] and [0035]). The aspects of claim 18, however, recite numerous events which are not further disclosed in Yamada, *et al.*, namely a link status change, a network keep alive, a proxy-ARP packet, and a re-authentication packet. Moreover, such events disclosed in claim 18 are indicative of processes starting-up (e.g., the spinning-up of a magnetic disk drive), as opposed to events indicating the termination of a process (e.g. the spinning-down of a magnetic disk drive) as disclosed in Yamada, *et al.* To this end, claim 18 recites these events that indicate power is to be restored as *wake events*, whereas the cause of power restoration in Yamada, *et al.* are *terminating events* such as the *termination* of a magnetic-disk device spinning or the completion of an I/O operation. (See pg. 3, ¶ [0037] and pg. 4, ¶ [0047]). For at least these reasons, Yamada, *et al.* does not teach or suggest these aspects of claim 18 and rejection of this claim should be withdrawn at least on these grounds.

Since it has been shown that Yamada, *et al.* and Watanabe do not alone or in combination teach or suggest every element of the subject claims, rejection of claims 1, 3-9, 11-15, and 17-25 should be withdrawn. Further, since the Examiner acknowledges that Watanabe does not teach or suggest maintaining full power to the CPU and network radio, these claims are believed to be allowable.

II. Rejection of Claim 26 Under 35 U.S.C. §103(a)

Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada, *et al.* in view of Watanabe and Schneider, *et al.* (US 2005/0015618). It is requested that this rejection be withdrawn for at least the following reasons. Yamada, *et*

al., Watanabe, and Schneider, *et al.*, taken alone or in combination, do not teach or suggest all elements recited in the subject claim. More particularly, Schneider, *et al.* fails to make up for the aforementioned deficiencies of Yamada, *et al.* and Watanabe with respect to ***maintaining full power to a CPU and a network radio to ensure reliable uninterrupted network communication*** as recited in claim 1, and similarly claim 26. For this reason, rejection of this claim should be withdrawn.

III. **Rejection of Claims 27-28 Under 35 U.S.C. §103(a)**

Claims 27-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada, *et al.* in view of Watanabe and Brubacher-Cressman, *et al.* (US 2005/0192063). It is requested that this rejection be withdrawn for at least the following reasons. Yamada, *et al.*, Watanabe, and Brubacher-Cressman, *et al.*, taken alone or in combination, do not teach or suggest all elements recited in the subject claims. More particularly, Brubacher-Cressman, *et al.* fails to make up for the aforementioned deficiencies of Yamada, *et al.* and Watanabe with respect to claims 1 and 14 from which claims 27 and 28 respectively depend. For at least this reason, rejection of these claims should be withdrawn.

Furthermore, Examiner acknowledges that Yamada, *et al.* and Watanabe do not disclose or suggest ***polling at least one disparate component associated with the wireless mobile terminal to determine frequency of use, the frequency of use employed to control a level of power to the disparate component*** as recited in claim 27, and offers Brubacher-Cressman, *et al.* to cure this deficiency. However, Brubacher-Cressman, *et al.* does not disclose this aspect either.

Brubacher-Cressman, *et al.* generally relates to controlling the backlight of an LCD on a portable device and more particularly to controlling such as a function of information displayed on the screen. Thus, the more information, the longer the backlight should remain lit subject to other considerations. However, Brubacher-Cressman, *et al.* does not contemplate ***the frequency of use employed to control a level of power to the disparate component*** as asserted by the Examiner.

Aside from being completely silent in regard to this aspect, the section cited by Examiner for support merely discloses keeping a log file of a user's desired duration for

having the backlight on while performing similar tasks. The system of Brubacher-Cressman, *et al.* then averages these durations to decide how long to keep the backlight on for the given application. (See ¶ [0041]). Contrarily, claim 27 uses *frequency of use to control a level of power* (not a *duration of power*) to the component. Thus, Brubacher-Cressman, *et al.* fails to disclose this aspect of the subject claims.

Additionally, Brubacher-Cressman, *et al.* is completely silent regarding *populating a history log with utilization of components of the portable terminal according to time of day; and utilizing the history log to ensure power is provided to components of the portable terminal based at least in part upon a comparison between time of day the component experiences a high-level of use and the current time of day* as recited in claim 28. As described above, the Examiner cites a section of Brubacher-Cressman, *et al.* referring to learning the portable device to control its backlight duration based on prior backlight durations for similar applications. On the contrary, claim 28 concerns powering a device according to the time of day as compared to previous times of day wherein the device was primarily used. Accordingly, Brubacher-Cressman, *et al.* fails to disclose or suggest this aspect as well.

For at least the foregoing reasons, and because Brubacher-Cressman, *et al.* fails to make up for the aforementioned deficiencies of Yamada, *et al.* and Watanabe with respect to claims 1 and 14 (from which claims 27 and 28 depend), Yamada, *et al.*, Watanabe, and Brubacher-Cressman, *et al.*, taken alone or in combination, fail to disclose or suggest each and every element of the subject claims. Accordingly, this rejection should be withdrawn. Moreover, since the Examiner acknowledges that Brubacher-Cressman, *et al.* does not teach the aspects of claims 27 and 28, these claims are believed to be allowable.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [SYMBP193US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/

Himanshu S. Amin

Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731